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December 14, 2017

Mr. Samuel Unger, P.E.
Executive Officer
California Regional Water Quality Control Board—Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Ms. Erum Razzak

Subject: Request for Schedule Revision to the Beach Cities Enhanced Watershed Management Program

Dear Mr. Unger:

The Beach Cities Watershed Management Group (Cities of Manhattan Beach, Hermosa Beach, and Redondo Beach¹) respectfully requests a change in the implementation schedule of the Beach Cities Enhanced Watershed Management Program (Beach Cities EWMP) to investigate the use of centralized high flow capacity trash device technologies and other approved equivalent systems certified by the State Water Resources Control Board (State Board) to meet the final Santa Monica Bay Nearshore and Offshore Debris TMDL (SMB Debris TMDL) receiving water limitation (RWL) for trash. The schedule modification requested will affect interim compliance milestones, however no changes to the final compliance deadlines are being requested² at this time.

¹ The City of Torrance has substantially completed retrofit of its Santa Monica Bay watershed area through several recent grant funded projects.

² Manhattan Beach has three additional years to meet the final deadline for having enacted all three bans specified in the TMDL prior to the stated deadline, these include bans on plastic bags, restaurant take out polystyrene, and smoking in public places.

Enclosed are the following revisions proposed in the EWMP:

- Table ES-12 Compliance Schedule for the Santa Monica Bay and Dominguez Channel Watersheds
- Table 2-3 Waterbody-Pollutant Combination Prioritization and Pollutant Interim and Final Compliance Targets for Santa Monica Bay Watershed Portion of the Beach Cities EWMP Area
- Table 4-1 Compliance Deadlines associated with Santa Monica Bay Watershed WBPCs

The unrevised pages from the EWMP are also included for your reference.

Justification for Requested Modification to EWMP Schedule

Since the submittal (and subsequent approval) of the SMB Debris TMDL Trash Monitoring and Reporting Plans (TMRPs), the Statewide Trash Amendments have been enacted providing for a broader range of choices in full capture systems than those previously certified by the Los Angeles Regional Water Quality Control Board (Regional Board). Several of the State Board certified high flow capacity devices remove sediment and floating hydrocarbons and will assist in attaining waste load allocations for other 303d listed pollutants in Santa Monica Bay besides trash, in particular, DDT and PCBs which are associated with the sediment or non-aqueous phase fraction of stormwater discharges. Having initiated implementation of the SMB Debris TMDL, the Beach Cities WMG agencies now have experience in maintaining both catch basin insert devices installed to meet the initial milestones, as well as high flow capacity devices installed prior to the SMB Debris TMDL, and have found the maintenance of the high flow capacity devices to be less labor intensive and costly than maintenance of catch basin insert devices. In addition, the catch basins inserts can cause street flooding and in streets with limited slopes and very flat grades, these devices can not be installed.

The Beach Cities agencies are also investigating incorporation of trash capture into planned multi-benefit treatment systems in regional EWMP BMP and green street projects consistent with the new provisions of the Statewide Trash Amendments. For these reasons the Beach Cities WMG requests this schedule change to investigate the additional certified full capture choices, and equivalent systems available to re-evaluate the most cost-effective way to comply with the final RWL for trash in Santa Monica Bay.

In early 2017, the Beach Cities WMG was fortunate to obtain a \$3,099,400 grant for its Hermosa Beach Greenbelt Infiltration Project, a regional project in the Beach Cities EWMP high-priority Santa Monica Bay 6-1 sub-watershed. The drainage area to the Hermosa Beach Greenbelt project is 2,927 acres, which is 37% of the Beach Cities WMG's Santa Monica Bay Watershed area. This project is in the preliminary design phase, and the design contractor has been asked to evaluate the feasibility of incorporating a certified trash full capture system into its design. This project is scheduled to be completed in 2020, coinciding

with the final SMB Debris TMDL compliance deadline³, however, execution of the grant agreement is being delayed by the State Water Resources Control Board (Spencer Joplin, Grant Manager) which may affect the timeline of the project. Since this project has the potential to serve as a full capture trash system for a large drainage area within the Beach Cities WMG Santa Monica Bay Watershed, the Beach Cities WMG would like to defer the installation of certified catch basin insert devices in this area, pending the design of this regional multi-benefit EWMP project.

A feasibility analysis is underway for a second multi-benefit regional EWMP project, the Manhattan Beach Infiltration Trench project, which will capture drainage from a 1,481 acre tributary area (19% of the Beach Cities WMG's Santa Monica Bay watershed). The schedule for this project is to complete design by 2019 and construction by 2021, 2-years before the City of Manhattan Beach's final compliance deadline of 2023 for the SMB Debris TMDL. The City of Manhattan Beach (who is the sole contributor of drainage to this project) would like to explore the feasibility of incorporating a full capture trash system into the design of this project as well, eliminating the need to retrofit upstream catch basins.

The Redondo Beach Seaside Lagoon sub-watershed is located in the central portion of the City of Redondo Beach, and has an approximate drainage area of 441 acres. This area is included with Redondo Beach's Waterfront Development Project, which is currently in the design and permitting phase, however undergoing legal review. The City of Redondo Beach would like to explore the feasibility of incorporating a full capture trash system into the design of this project as well, eliminating the need to retrofit upstream catch basins. This sub-watershed is adjacent to the City of Redondo Beach's Trash Monitoring and Reporting Program area and also drains into King Harbor. This sub-watershed has localized flooding areas that will limit the use of catch basins screening devices.

Additionally, the Beach Cities WMG has begun initial planning efforts to determine locations for potential green street projects within each jurisdiction's Santa Monica Bay drainage area to meet the Beach Cities EWMP milestones, and the group plans to submit a joint green street project application for IRWM funding in early 2018. The Beach Cities WMG agencies plan to incorporate individual trash treatment controls into their green street project designs to meet the State Board's definition of a full capture multi-benefit treatment system.

As reflected in the schedule change requested below, each agency will determine a compliance strategy by August 20, 2018 (August 20, 2019 for Manhattan Beach), which will be reflected in the adaptive management report we will be submitting to you by December

³ The final compliance deadline is March 2020 for the cities of Redondo Beach and Hermosa Beach, and March 2023 for the City of Manhattan Beach.

15, 2018 (and for Manhattan Beach, in their individual City Annual Report submitted by December 15, 2019).

Schedule Change Requested

The Beach Cities WMG requests to replace the March 20, 2018 and 2019 milestones with the following action items:

- By August 20, 2018, the Cities of Hermosa Beach, and Redondo Beach will determine their compliance strategy for installing full capture trash systems to serve the Santa Monica Bay MS4 tributary areas within their respective jurisdictions, taking into consideration planned regional projects. The compliance strategies will be outlined in the adaptive management report that is due in December 2018.
- By March 20, 2019, the the Cities of Hermosa Beach and Redondo Beach will complete installation of full capture trash systems serving 50% of the area outside of the tributary areas to the regional projects within the Santa Monica Bay MS4 area within each of their respective jurisdictions.
- By August 20, 2019 Manhattan Beach will determine a compliance strategy for installing full capture trash systems to serve the Santa Monica Bay tributary areas within its jurisdiction taking into consideration the preliminary design findings of the Manhattan Beach Infiltration Trench and Hermosa Beach Greenbelt EWMP Regional BMPs. The compliance strategy will be outlined in the City's individual Annual Report due in December 2019.
- By March 20, 2020, the City of Manhattan Beach will complete installation of full capture trash systems serving 50% of the area outside of the tributary areas to the Manhattan Beach Infiltration Trench and Hermosa Beach Greenbelt EWMP Regional projects within the Santa Monica Bay MS4 area of the City.

No change to the final milestone⁴ for achievement of 100% reduction in trash from baseline is being proposed at this time.

Implemented Structural Controls

To implement the SMB Debris TMDL, the Beach Cities WMG agencies originally planned to install trash exclusion devices in catch basins in a phased approach to meet each interim compliance deadline (20% load reduction per year between 2016 and 2019) as well as the final compliance deadline (100% load reduction) in 2020⁵ as described in the TMDL and each respective agency's approved TMRP⁶. A summary of the structural devices installed

⁴The final compliance deadline is March 20, 2020 for the cities of Redondo Beach and Hermosa Beach, and March 20, 2023 for the City of Manhattan Beach.

⁵ The final compliance deadline for Manhattan Beach is 2023.

⁶ A review letter on the draft CIMP, dated May 22, 2015, approved the TMRP and PMRP exemption requests from the City of Hermosa Beach, the PMRP exemption request from the City of Torrance, the PMRP exemption request from the City of Manhattan Beach, and the three year extension of the final TMRP compliance date for the City of Manhattan Beach (LARWQCB, 2015). The Board approved the TMRP for the City of Redondo Beach on May 22,

to-date is included in Table 1 below, and a more detailed discussion of implementation activities pertinent to the SMB Debris TMDL is included in each agency’s respective annual report.

City	Trash Exclusion Devices Installed To-Date
Hermosa Beach	26 catch basins have been retrofit with CPS and ARS units, and an additional 26 catch basins have been retrofit with ARS units only.
Manhattan Beach	7 CDS gross pollutant hydrodynamic separators have been installed on major storm drains within the City and were operational prior to the development of the SMB Debris TMDL. These CDS units are sized to capture all trash from at least the 1year, 1 hour storm in their respective drainage areas. In addition to the CDS units, the City has also installed approximately sixty (60) debris screens City-wide on catch basin openings that have historically required frequent cleaning (Priority A).
Redondo Beach	5 CDS gross pollutant hydrodynamic separators have been installed that capture all particles greater than 2.4 millimeters. Four FCDs (United Stormwater Connector Pipe Screens) and four Automatic Retractable Screens for the City-owned catch basins have been installed within the Beryl Street drainage (drainage area of approximately 69.4 acres).

Non-Structural/Institutional Control Measures for Trash

In addition to the structural trash controls in place in the Beach Cities WMG, the following non-structural targeted control measures are also being implemented.

Clean Bay Certified annual inspections of food service establishments. The Clean Bay Certified (CBC) program for food service establishments sponsored by the Bay Foundation has received a letter of support from the Executive Officer of the Regional Board (June 6, 2016). The CBC program addresses a number of the priority water quality concerns including: trash, bacteria, and nutrients. Of the 43 individual CBC inspection checklist items, 10 are specifically related to prevention and control of trash.

Enhanced Street Sweeping

- The Cities of Hermosa Beach, Manhattan Beach, and Redondo Beach conduct street sweeping of all City streets once per week.

2015. The City of Redondo Beach request for exemption from the PMRP was approved by the Board on November 12, 2015 [LARWQCB, 2015c].

Construction site inspections include trash management checks. Annual stormwater training of construction inspectors emphasizes importance of controlling trash as well as sediment-borne pollutants to target pollutants of concern in this watershed.

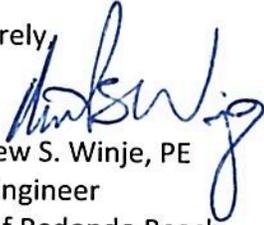
Additional Institutional Trash Control Measures

- In Manhattan Beach, Trash enclosures for new commercial facilities are required to be covered, enclosed, and plumbed to the sewer.
- In Redondo Beach, Trash enclosures for new commercial and industrial facilities are required to be build with a structure to cover and enclose the trash bins.
- The City of Manhattan Beach and its franchise solid waste hauler launched the Green Business Program to recognize businesses that incorporate sustainability into their daily practices with the objective of reducing waste.
- The City of Manhattan Beach has adopted the following three bans affording it an additional 3 years, until 2023, to comply with the SMB Debris TMDL:
 - Smoking Ban Ordinance that prohibits smoking in all public places in the City, including a ban on smoking inside any multi-family housing units or in any outdoor areas of a multi-unit housing property.
 - The Plastic Bag Ban Ordinance prohibits the distribution of single-use plastic bags at point-of-sale and instead limits distribution at point-of-sale to recycled content paper bags or reusable bags.
 - Polystyrene Ordinance prohibits the use of polystyrene food service ware in the City, including a prohibition on ice coolers, straws, cup lids and utensils made from polystyrene materials, and a prohibition on the sale of polystyrene food service materials in local retail stores
- The City of Hermosa Beach has established smoke-free zones in the following locations: all public parks; Pier Plaza, the heart of the city's downtown; the Hermosa Beach Pier; outdoor dining areas, including within five feet of the outdoor dining areas; the Strand, which is the sidewalk and bike path adjacent to and running the full length of the beach; the Greenbelt, which is the pedestrian path running the length of the City between Valley Drive and Ardmore Avenue, and City-owned public parking lots. Smoking had already been prohibited on the beach, in city buildings and inside of restaurants.
- The City of Redondo Beach has an ordinance prohibiting smoking on beaches and recreational areas.
- The City of Hermosa Beach enforces a Polystyrene Ordinance banning polystyrene food service ware, and a plastic Bag Ban ordinance prohibiting single-use plastic bags in the City.
- The City of Hermosa Beach has instituted a matrix of requirements for special events in the City, including measures to reduce waste and single-use items, limit and reduce the size of handouts and flyers, control litter, and increase recycling.
- The City of Redondo Beach holds one document shredding event and two Household Hazardous Waste Collection Events per year for all residents

Upon approval of the aforementioned EWMP modifications, the Beach Cities EWMP will be revised to incorporate the approved changes.

If you have any questions or require further information, please contact me at (310) 318-0661 or andrew.winje@redondo.org.

Sincerely,



Andrew S. Winje, PE
City Engineer
City of Redondo Beach

Copies:

City of Hermosa Beach
City of Manhattan Beach
City of Torrance
Los Angeles County Flood Control District

Attachments:

Beach Cities Revised EWMP Pages
Unrevised Pages from the Beach Cities EWMP

Attachment A: Revised EWMP Pages

Table ES-12. Compliance Schedule for the Santa Monica Bay and Dominguez Channel Watersheds

Category	Watershed	Pollutant(s)	Wet/Dry Weather	Date	Implementation Action			
1: Highest Priority	Dominguez Channel and Dominguez Channel Estuary	Toxicity ¹ Total Copper ^{1,2} Total Lead ^{1,2} Total Zinc ^{1,2} Cadmium ²	Wet/Dry	Current ⁴	Interim: Comply with the interim water quality-based effluent limitations as listed in the TMDL ³			
				March 2032	Final: Comply with the final water quality-based effluent limitations as listed in the TMDL ³			
	Santa Monica Bay	Bacteria	Dry	Wet	July 2006	Final: Summer-dry single sample Allowable Exceedance Days (AED) met; compliance is currently in effect and attained through diversions and non-structural BMPs.		
					November 2009	Final: Winter-Dry period Single Sample AED met; compliance is currently in effect and attained through diversions and non-structural BMPs.		
				Wet	July 2018	Interim: 50% single sample ED reduction		
					July 2021	Final: Geometric Mean [GM] targets met Final: Single sample AED targets met		
					March 2016	Interim: 20% load reduction met through implementation of trash excluders		
				Trash/Debris	N/A	N/A	March 2017	Interim: 40% load reduction met through implementation of trash excluders
							August 2018	Interim (Cities of Hermosa Beach and Redondo Beach): Determination of compliance strategy for installing full capture trash systems
	March 2019	Interim (Cities of Hermosa Beach and Redondo Beach): Installation of full capture trash systems serving 50% of the MS4 drainage area to Santa Monica Bay outside of Regional EWMP BMPs						
	August 2019	Interim (City of Manhattan Beach): Determination of compliance strategy for installing full capture trash systems.						
	March 2020	Interim (City of Manhattan Beach): Installation of full capture trash systems serving 50% of the MS4 drainage area to Santa Monica Bay outside of Regional EWMP BMPs						
		Final (Cities of Hermosa Beach and Redondo Beach): 100% reduction in trash from baseline through the installation of full capture trash systems serving MS4 drainage area to Santa Monica Bay.						
	March 2023	Final (City of Manhattan Beach): 100% reduction in trash from baseline through the installation of full capture trash systems serving MS4 drainage area to Santa Monica Bay.						

Category	Watershed	Pollutant(s)	Wet/Dry Weather	Date	Implementation Action
		DDTs	N/A	N/A	Since the TMDL effectively implements an anti-degradation approach (i.e., historic low MS4 concentrations or loads must be kept the same or lower), and the Beach Cities EWMP Agencies are currently presumed to be achieving the WLAs (thus negating the need for Reasonable Assurance Analysis), no compliance schedule is proposed.
		PCBs	N/A	N/A	
2: High Priority	Dominguez Channel and Dominguez Channel Estuary	Bacteria	Dry	December 2023	Interim: 50% load reduction
				December 2025 ⁵	Final: 100% compliance may be demonstrated by the Permittee in one of three ways: <ol style="list-style-type: none"> 1. Meeting the allowed exceedance days (5 days during the dry weather period); or 2. Meet the allowed exceedance percentage (1.6% during a dry weather period) within the total drainage area served by the MS4. 3. Diversions are in place such that they are consistently operational, well maintained, and sized to effectively eliminate discharges to the receiving water year-round dry weather days.
			Wet	December 2016	Provide documentation supporting minimum control measure (MCM) enhancements implemented over the past year ⁶
				December 2017	Provide documentation supporting MCM enhancements implemented over the past year ⁶
				December 2018	Identify planned green streets locations to treat runoff from 3% of SFR, MFR, COM, and IND land uses in cities of Redondo Beach and Manhattan Beach.
				December 2019	City Council approval of Plans & Specifications for green streets to treat runoff from 3% of SFR, MFR, COM, and IND land uses in cities of Redondo Beach and Manhattan Beach. Begin installation of catch basin inlet filters in the DC-Torrance analysis region.
				December 2020	Develop concept reports for regional BMPs in the cities of Redondo Beach and Manhattan Beach. Begin construction on green streets to treat runoff from 3% of SFR, MFR, COM, and IND land uses in cities of Redondo Beach and Manhattan Beach.
				December 2021	Submit grant application for any one of the proposed regional projects in the cities of Redondo Beach and Manhattan Beach.
				December 2022	Interim Milestone: 25% of target load reduction

Category	Watershed	Pollutant(s)	Wet/Dry Weather	Date	Implementation Action
				December 2023	Identify planned green streets locations to treat runoff from an additional 4% (7% total) of SFR, MFR, COM, and IND land uses in cities of Redondo Beach and Manhattan Beach.
				December 2024	Begin construction on planned green streets to treat runoff from an additional 4% (7% total) of SFR, MFR, COM, and IND land uses in cities of Redondo Beach and Manhattan Beach. Continue installation of catch basin inlet filters in the DC-Torrance analysis region.
				December 2025	Release Request for Proposals for regional BMP designs in Redondo Beach and/or Manhattan Beach
				December 2026	Complete construction on planned green streets to treat runoff from an additional 4% (7% total) of SFR, MFR, COM, and IND land uses in cities of Redondo Beach and Manhattan Beach.
				December 2027	Interim Milestone: 50% of target load reduction
				December 2028	Produce regional BMP design reports; identify locations for green streets implementation to treat runoff from an additional 7% (14% total) of SFR, MFR, COM, and IND land uses in the cities of Redondo Beach and Manhattan Beach.
				December 2029	Begin regional BMP permitting process for project in Redondo Beach or Manhattan Beach.
				December 2030	Begin construction on planned green streets to treat runoff from an additional 7% (14% total) of SFR, MFR, COM, and IND land uses in the cities of Redondo Beach and Manhattan Beach.
				December 2031 ⁷	Begin regional BMP construction of project in Redondo Beach or Manhattan Beach.
				March 2032 ⁸	Final Milestone: 100% compliance may be demonstrated by the Permittee in one of three ways: <ol style="list-style-type: none"> 1. Meeting the allowed exceedance days (10 days during a wet weather period, plus high flow suspension days) 2. Meeting the target load reduction (33%); or 3. Meeting the allowed exceedance percentage (19% during a wet weather period) within the total drainage area served by the MS4.

Category	Watershed	Pollutant(s)	Wet/Dry Weather	Date	Implementation Action
3: Medium Priority ⁹	Dominguez Channel and Dominguez Channel Estuary	Cyanide pH Selenium Mercury Cadmium Arsenic Chromium Silver Nickel Thallium	N/A	March 2032 ⁸	Final: Comply with the applicable water quality standards as listed in Error! Reference source not found.. As required by the Permit, monitoring for these pollutants will occur under the CIMP. If monitoring data suggest that the Beach Cities Agencies' MS4s may cause or contribute to exceedances of these pollutants in the receiving water, ¹⁰ these contributions will be addressed through modifications to the EWMP as a part of the adaptive management process, as described in Permit section VI.C.2.a.iii.

- ¹ Toxicity, copper, lead, and zinc are listed as Category 1 wet weather pollutants in Dominguez Channel.
- ² Copper, lead, zinc, and cadmium are listed as Category 1 pollutants in Dominguez Channel Estuary with annual average WQBELs that apply to both wet and dry weather.
- ³ Dominguez Channel Estuary WQBELs for total copper, lead, zinc, and cadmium are addressed by the implementation actions taken for Dominguez Channel wet weather WQBELs.
- ⁴ According to monitoring data at Dominguez Channel Mass Emission Station S28, the copper, lead, and zinc exceedance rates of the interim WQBELs are 9%, 3% 10% respectively, based on qualified sampling events between 2002 and 2013. At the Torrance Lateral Mass Emission Station TS19, the copper, lead, and zinc exceedance rates of the interim WQBELs are 5%, 0%, and 8% respectively. These monitoring locations receive flow contributions from the Beach Cities WMG, as well as other WMGs. CIMP monitoring and subsequent adaptive management will evaluate if the Beach Cities WMG are exceeding the interim Category 1 WQBELs and evaluate compliance with the Dominguez Channel Toxics TMDL.
- ⁵ The proposed compliance schedule for dry weather bacteria is the minimum time expected to be necessary for the agencies to plan, design, permit, construct, monitor, and adaptively manage the proposed dry weather BMPs, and is also consistent with the 10-year MS4 compliance schedule for dry weather from the TMDL for indicator bacteria in the San Gabriel River, Estuary and Tributaries, adopted by the LARWQCB in 2015 (Water Quality Control Plan, Attachment A to Resolution No. R15-005, adopted by the RWQCB in 2015).
- ⁶ Proposed milestones for MCM enhancement implementation are detailed in Error! Reference source not found..
- ⁷ If regional BMPs are deemed necessary for dry weather compliance, their construction dates will be moved up to meet the dry weather deadlines.
- ⁸ The proposed compliance schedule for wet weather bacteria and all Category 3 pollutants was selected to be consistent with the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL (Dominguez Channel Toxics TMDL) (RWQCB, 2011). This compliance schedule is the minimum time expected to be necessary for the agencies to plan, design, permit, construct, monitor, and adaptively manage the proposed wet weather BMPs.
- ⁹ Cyanide, pH, selenium, mercury, and cadmium are Category 3 pollutants in Dominguez Channel. Arsenic, chromium, silver, nickel, mercury, and thallium are Category 3 pollutants in Dominguez Channel Estuary.
- ¹⁰ This will be assumed to be the case if monitoring data show that outfall concentrations and receiving water concentrations are in excess of the applicable water quality criteria for the same monitoring event.

Table 2-3. Water Body-Pollutant Combination Prioritization and Pollutant Interim and Final Compliance Targets for Santa Monica Bay Watershed Portion of the Beach Cities EWMP Area

Category	Water Body	Pollutant	Reason for Categorization	WQBEL/RWL/ Objective Basis	Interim WQBEL/ RWL	Final WQBEL/ RWL/Objective
1: Highest Priority	Santa Monica Bay Beaches	Dry Weather Bacteria	SMB Beaches Dry Weather Bacteria TMDL	Daily and Weekly Sampling Schedule	N/A	Summer-Dry Single Sample Allowable Exceedance Days (AED) ¹ met Winter-Dry period Single Sample AED ¹ met
		Wet Weather Bacteria	SMB Beaches Wet Weather Bacteria TMDL	Daily and Weekly Sampling Schedule/	50% cumulative percentage reduction from total required exceedance day reduction ²	Single Sample and Geometric Mean AED ¹ and GM target met
	Santa Monica Bay	Trash/ Debris	SMB Debris TMDL	Annual monitoring	Incremental reduction from baseline waste load allocation ³ (6815.6 gals/year)	100% reduction from baseline waste load allocation ³ (6815.6 gals/year)
		DDTs	SMB PCBs and DDT TMDL	3-Year Average	N/A	27.08 g/year ⁴
		PCBs	SMB PCBs and DDT TMDL	3-Year Average	N/A	140.25 g/year ⁴
2: High Priority	N/A	None	No other 303(d) listings exist for the Beach Cities portion of SMB			
3: Medium Priority	N/A	None	Outfall and receiving water monitoring data are not available for the Beach Cities portion of SMB			

¹Per the Basin Plan Objective REC1 Water Bodies Limit for Bacteria. Please refer to **Error! Reference source not found.** for allowable exceedance day limits of each subwatershed.

² Total required exceedance day reduction is defined as the difference between existing exceedance day and the allowable exceedance day for each subwatershed

³ Baseline WLA is the sum of baseline WLA from Manhattan Beach, Redondo Beach and Hermosa Beach

⁴This limit is applicable to all of Santa Monica Bay.

4 IMPLEMENTATION SCHEDULE

4.1 COMPLIANCE SCHEDULE

The following sections present the proposed compliance schedules and project sequencing necessary to meet the interim and final compliance deadlines for the Beach Cities EWMP WPBCs.

4.1.1 SANTA MONICA BAY WATERSHED

Bacteria, debris, and PCBs and DDTs have been identified as Category 1 WBPCs in the Santa Monica Bay Watershed. No Category 2 or 3 WBPCs are specified in this watershed. The interim and final compliance deadlines in the Santa Monica Bay watershed are summarized in [Table 4-1](#).

Table 4-1. Compliance Deadlines associated with Santa Monica Bay Watershed WBPCs

Category	Pollutant(s)	Date	Action
1: Highest Priority	Dry Weather Bacteria	July 2006	Final: Summer-dry single sample Allowable Exceedance Days (AED) met; compliance is currently in effect and attained through diversions and non-structural BMPs.
		November 2009	Final: Winter-Dry period Single Sample AED met; compliance is currently in effect and attained through diversions and non-structural BMPs.
	Wet Weather Bacteria	7/15/2018	Interim: 50% single sample ED reduction
		7/15/2021	Final: Geometric Mean [GM] targets met Final: Single sample AED targets met
	Trash/Debris	3/20/2016	Interim: 20% load reduction
		3/20/2017	Interim: 40% load reduction
		8/20/2018	Interim (Cities of Hermosa Beach and Redondo Beach): Determination of compliance strategy for installing full capture trash systems
		3/20/2019	Interim (Cities of Hermosa Beach and Redondo Beach): Installation of full capture trash systems serving 50% of the MS4 drainage area to Santa Monica Bay outside of Regional EWMP BMPs
		8/20/2019	Interim (City of Manhattan Beach): Determination of compliance strategy for installing full capture trash systems.
		3/20/2020	Interim (City of Manhattan Beach): Installation of full capture trash systems serving 50% of the MS4 drainage area to Santa Monica Bay outside of Regional EWMP BMPs
			Final (Cities of Hermosa Beach and Redondo Beach): 100% reduction in trash from baseline through the installation of full capture trash systems serving MS4 drainage area to Santa Monica Bay.
	3/20/2023	Final (City of Manhattan Beach): 100% reduction in trash from baseline through the installation of full	

Category	Pollutant(s)	Date	Action
			capture trash systems serving MS4 drainage area to Santa Monica Bay.
	DDTs	N/A	Since the TMDL effectively implements an anti-degradation approach (i.e., historic low MS4 concentrations or loads must be kept the same or lower), and the Beach Cities EWMP Agencies are currently presumed to be achieving the WLAs (thus negating the need for RAA), no compliance schedule is proposed.
	PCBs	N/A	
2: High Priority	N/A	N/A	N/A
3: Medium Priority	N/A	N/A	N/A

Attachment B: Unrevised Pages from the Beach Cities EWMP

Table ES-12. Compliance Schedule for the Santa Monica Bay and Dominguez Channel Watersheds

Category	Watershed	Pollutant(s)	Wet/Dry Weather	Date	Implementation Action	
1: Highest Priority	Dominguez Channel and Dominguez Channel Estuary	Toxicity ¹ Total Copper ^{1,2} Total Lead ^{1,2} Total Zinc ^{1,2} Cadmium ²	Wet/Dry	Current ⁴	Interim: Comply with the interim water quality-based effluent limitations as listed in the TMDL ³	
				March 2032	Final: Comply with the final water quality-based effluent limitations as listed in the TMDL ³	
	Santa Monica Bay	Bacteria	Dry	July 2006	Final: Summer-dry single sample Allowable Exceedance Days (AED) met; compliance is currently in effect and attained through diversions and non-structural BMPs.	
				November 2009	Final: Winter-Dry period Single Sample AED met; compliance is currently in effect and attained through diversions and non-structural BMPs.	
			Wet	July 2018	Interim: 50% single sample ED reduction	
				July 2021	Final: Geometric Mean [GM] targets met Final: Single sample AED targets met	
			Trash/Debris	N/A	March 2016	Interim: 20% load reduction met through implementation of trash excluders
					March 2017	Interim: 40% load reduction met through implementation of trash excluders
					March 2018	Interim: 60% load reduction met through implementation of trash excluders
					March 2019	Interim: 80% load reduction met through implementation of trash excluders
					March 2020	Final: 100% load reduction met through implementation of trash excluders
			DDTs	N/A	N/A	Since the TMDL effectively implements an anti-degradation approach (i.e., historic low MS4 concentrations or loads must be kept the same or lower), and the Beach Cities EWMP Agencies are currently presumed to be achieving the WLAs (thus negating the need for Reasonable Assurance Analysis), no compliance schedule is proposed.
	PCBs	N/A	N/A			
	2: High Priority	Dominguez Channel and Dominguez Channel Estuary	Bacteria	Dry	December 2023	Interim: 50% load reduction
					December 2025 ⁵	Final: 100% compliance may be demonstrated by the Permittee in one of three ways: 1. Meeting the allowed exceedance days (5 days during the dry weather period); or

Category	Watershed	Pollutant(s)	Wet/Dry Weather	Date	Implementation Action
					2. Meet the allowed exceedance percentage (1.6% during a dry weather period) within the total drainage area served by the MS4. 3. Diversions are in place such that they are consistently operational, well maintained, and sized to effectively eliminate discharges to the receiving water year-round dry weather days.
			Wet	December 2016	Provide documentation supporting minimum control measure (MCM) enhancements implemented over the past year ⁶
				December 2017	Provide documentation supporting MCM enhancements implemented over the past year ⁶
				December 2018	Identify planned green streets locations to treat runoff from 3% of SFR, MFR, COM, and IND land uses in cities of Redondo Beach and Manhattan Beach.
				December 2019	City Council approval of Plans & Specifications for green streets to treat runoff from 3% of SFR, MFR, COM, and IND land uses in cities of Redondo Beach and Manhattan Beach. Begin installation of catch basin inlet filters in the DC-Torrance analysis region.
				December 2020	Develop concept reports for regional BMPs in the cities of Redondo Beach and Manhattan Beach. Begin construction on green streets to treat runoff from 3% of SFR, MFR, COM, and IND land uses in cities of Redondo Beach and Manhattan Beach.
				December 2021	Submit grant application for any one of the proposed regional projects in the cities of Redondo Beach and Manhattan Beach.
				December 2022	Interim Milestone: 25% of target load reduction
				December 2023	Identify planned green streets locations to treat runoff from an additional 4% (7% total) of SFR, MFR, COM, and IND land uses in cities of Redondo Beach and Manhattan Beach.
				December 2024	Begin construction on planned green streets to treat runoff from an additional 4% (7% total) of SFR, MFR, COM, and IND land uses in cities of Redondo Beach and Manhattan Beach. Continue installation of catch basin inlet filters in the DC-Torrance analysis region.
				December 2025	Release Request for Proposals for regional BMP designs in Redondo Beach and/or Manhattan Beach
				December 2026	Complete construction on planned green streets to treat runoff from an additional 4% (7% total) of SFR, MFR, COM, and IND land uses in cities of Redondo Beach and Manhattan Beach.

Category	Watershed	Pollutant(s)	Wet/Dry Weather	Date	Implementation Action
				December 2027	Interim Milestone: 50% of target load reduction
				December 2028	Produce regional BMP design reports; identify locations for green streets implementation to treat runoff from an additional 7% (14% total) of SFR, MFR, COM, and IND land uses in the cities of Redondo Beach and Manhattan Beach.
				December 2029	Begin regional BMP permitting process for project in Redondo Beach or Manhattan Beach.
				December 2030	Begin construction on planned green streets to treat runoff from an additional 7% (14% total) of SFR, MFR, COM, and IND land uses in the cities of Redondo Beach and Manhattan Beach.
				December 2031 ⁷	Begin regional BMP construction of project in Redondo Beach or Manhattan Beach.
				March 2032 ⁸	Final Milestone: 100% compliance may be demonstrated by the Permittee in one of three ways: <ol style="list-style-type: none"> 1. Meeting the allowed exceedance days (10 days during a wet weather period, plus high flow suspension days) 2. Meeting the target load reduction (33%); or 3. Meeting the allowed exceedance percentage (19% during a wet weather period) within the total drainage area served by the MS4.
3: Medium Priority ⁹	Dominguez Channel and Dominguez Channel Estuary	Cyanide pH Selenium Mercury Cadmium Arsenic Chromium Silver Nickel Thallium	N/A	March 2032 ⁸	Final: Comply with the applicable water quality standards as listed in Table ES-7 . As required by the Permit, monitoring for these pollutants will occur under the CIMP. If monitoring data suggest that the Beach Cities Agencies' MS4s may cause or contribute to exceedances of these pollutants in the receiving water, ¹⁰ these contributions will be addressed through modifications to the EWMP as a part of the adaptive management process, as described in Permit section VI.C.2.a.iii.

¹ Toxicity, copper, lead, and zinc are listed as Category 1 wet weather pollutants in Dominguez Channel.

² Copper, lead, zinc, and cadmium are listed as Category 1 pollutants in Dominguez Channel Estuary with annual average WQBELs that apply to both wet and dry weather.

³ Dominguez Channel Estuary WQBELs for total copper, lead, zinc, and cadmium are addressed by the implementation actions taken for Dominguez Channel wet weather WQBELs.

⁴ According to monitoring data at Dominguez Channel Mass Emission Station S28, the copper, lead, and zinc exceedance rates of the interim WQBELs are 9%, 3% 10% respectively, based on qualified sampling events between 2002 and 2013. At the Torrance Lateral Mass Emission Station TS19, the copper,

lead, and zinc exceedance rates of the interim WQBELs are 5%, 0%, and 8% respectively. These monitoring locations receive flow contributions from the Beach Cities WMG, as well as other WMGs. CIMP monitoring and subsequent adaptive management will evaluate if the Beach Cities WMG are exceeding the interim Category 1 WQBELs and evaluate compliance with the Dominguez Channel Toxics TMDL.

- ⁵ The proposed compliance schedule for dry weather bacteria is the minimum time expected to be necessary for the agencies to plan, design, permit, construct, monitor, and adaptively manage the proposed dry weather BMPs, and is also consistent with the 10-year MS4 compliance schedule for dry weather from the TMDL for indicator bacteria in the San Gabriel River, Estuary and Tributaries, adopted by the LARWQCB in 2015 (Water Quality Control Plan, Attachment A to Resolution No. R15-005, adopted by the RWQCB in 2015).
- ⁶ Proposed milestones for MCM enhancement implementation are detailed in **Table 2-8**.
- ⁷ If regional BMPs are deemed necessary for dry weather compliance, their construction dates will be moved up to meet the dry weather deadlines.
- ⁸ The proposed compliance schedule for wet weather bacteria and all Category 3 pollutants was selected to be consistent with the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL (Dominguez Channel Toxics TMDL) (RWQCB, 2011). This compliance schedule is the minimum time expected to be necessary for the agencies to plan, design, permit, construct, monitor, and adaptively manage the proposed wet weather BMPs.
- ⁹ Cyanide, pH, selenium, mercury, and cadmium are Category 3 pollutants in Dominguez Channel. Arsenic, chromium, silver, nickel, mercury, and thallium are Category 3 pollutants in Dominguez Channel Estuary.
- ¹⁰ This will be assumed to be the case if monitoring data show that outfall concentrations and receiving water concentrations are in excess of the applicable water quality criteria for the same monitoring event.

Table 2-3. Water Body-Pollutant Combination Prioritization and Pollutant Interim and Final Compliance Targets for Santa Monica Bay Watershed Portion of the Beach Cities EWMP Area

Category	Water Body	Pollutant	Reason for Categorization	WQBEL/RWL/ Objective Basis	Interim WQBEL/ RWL	Final WQBEL/ RWL/Objective
1: Highest Priority	Santa Monica Bay Beaches	Dry Weather Bacteria	SMB Beaches Dry Weather Bacteria TMDL	Daily and Weekly Sampling Schedule	N/A	Summer-Dry Single Sample Allowable Exceedance Days (AED) ¹ met Winter-Dry period Single Sample AED ¹ met
		Wet Weather Bacteria	SMB Beaches Wet Weather Bacteria TMDL	Daily and Weekly Sampling Schedule/	50% cumulative percentage reduction from total required exceedance day reduction ²	Single Sample and Geometric Mean AED ¹ and GM target met
	Santa Monica Bay	Trash/ Debris	SMB Debris TMDL	Annual monitoring	20% incremental reduction from baseline waste load allocation ³ (6815.6 gals/year), per year	100% reduction from baseline waste load allocation ³ (6815.6 gals/year)
		DDTs	SMB PCBs and DDT TMDL	3-Year Average	N/A	27.08 g/year ⁴
		PCBs	SMB PCBs and DDT TMDL	3-Year Average	N/A	140.25 g/year ⁴
2: High Priority	N/A	None	No other 303(d) listings exist for the Beach Cities portion of SMB			
3: Medium Priority	N/A	None	Outfall and receiving water monitoring data are not available for the Beach Cities portion of SMB			

¹Per the Basin Plan Objective REC1 Water Bodies Limit for Bacteria. Please refer to Table 2-4 for allowable exceedance day limits of each subwatershed.

² Total required exceedance day reduction is defined as the difference between existing exceedance day and the allowable exceedance day for each subwatershed

³ Baseline WLA is the sum of baseline WLA from Manhattan Beach, Redondo Beach and Hermosa Beach

⁴This limit is applicable to all of Santa Monica Bay.

4 IMPLEMENTATION SCHEDULE

4.1 COMPLIANCE SCHEDULE

The following sections present the proposed compliance schedules and project sequencing necessary to meet the interim and final compliance deadlines for the Beach Cities EWMP WPBCs.

4.1.1 SANTA MONICA BAY WATERSHED

Bacteria, debris, and PCBs and DDTs have been identified as Category 1 WBPCs in the Santa Monica Bay Watershed. No Category 2 or 3 WBPCs are specified in this watershed. The interim and final compliance deadlines in the Santa Monica Bay watershed are summarized in **Table 4-1**.

Table 4-1. Compliance Deadlines associated with Santa Monica Bay Watershed WBPCs

Category	Pollutant(s)	Date	Action
1: Highest Priority	Dry Weather Bacteria	July 2006	Final: Summer-dry single sample Allowable Exceedance Days (AED) met; compliance is currently in effect and attained through diversions and non-structural BMPs.
		November 2009	Final: Winter-Dry period Single Sample AED met; compliance is currently in effect and attained through diversions and non-structural BMPs.
	Wet Weather Bacteria	7/15/2018	Interim: 50% single sample ED reduction
		7/15/2021	Final: Geometric Mean [GM] targets met Final: Single sample AED targets met
	Trash/Debris	3/20/2016	Interim: 20% load reduction
		3/20/2017	Interim: 40% load reduction
		3/20/2018	Interim: 60% load reduction
		3/20/2019	Interim: 80% load reduction
		3/20/2020 ^[27]	Final: 100% load reduction
	DDTs	N/A	Since the TMDL effectively implements an anti-degradation approach (i.e., historic low MS4 concentrations or loads must be kept the same or lower), and the Beach Cities EWMP Agencies are currently presumed to be achieving the WLAs (thus negating the need for RAA), no compliance schedule is proposed.
PCBs	N/A		
2: High Priority	N/A	N/A	N/A
3: Medium Priority	N/A	N/A	N/A

²⁷ Manhattan Beach will receive three additional years to meet the final deadline for having enacted all three bans specified in the TMDL prior to the stated deadline, these include bans on plastic bags, restaurant take out polystyrene, and smoking in public places.